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ABSTRACT

A cortical bone implant is formed of two or more planks of bone which are connected with one or more offset pins. The pins may be right circular cylinders inserted into a corresponding offset bore which offset bends the inserted pin. The bending creates compression and tensile loads in the pin which loads creates friction compression forces on the planks connecting them to the pins by friction. The pins may have different shapes to form the offsets and different configurations for friction attachment to the planks. The implants may be formed of flat or L-shaped planks or bones formed into other shapes including interlocking arrangements. Processes and fixtures are disclosed for forming the pins, planks and implants. Various embodiments of the pins, planks, implants and processes are disclosed.